

REMARKS

Claims 16-18 have been canceled herein. New claims 24-26 have been added herein. Claims 19 and 20 have had their dependencies changed to depend upon claim 1 while claim 23 has been amended and now depends upon claim 21. Following entry of this Amendment, claims 1-15 and 19-26 are pending in the application, of which claims 1, 21 and 25 are independent.

35 U.S.C. §103(a) Rejections

Claims 1-23 were rejected under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 5,848,415 (hereinafter “Guck”) in view of United States Patent No. 6,857,102 (hereinafter “Bickmore”). Applicant respectfully traverses the rejections.

Summary of Claimed Invention

The claimed invention provides a mechanism for delivering customized content to a requesting mobile device such as a cellular phone. The content generated for delivery to the mobile device is converted from a generic markup language. The content being delivered to the mobile device is not only converted into a form of content that is displayable on the mobile device, but the converted content is also customized based upon one or more device attributes of the requesting mobile device prior to delivery.

Guck

Guck discusses the use of a transmission protocol and application format conversion process that may be utilized with an object database. Requests from a client device or a document cause the requested document to be retrieved, and if necessary, converted to a transmission protocol and application format required or requested for the requesting client device. The conversion process uses many different converter objects to perform the required transformations. In the event a single converter for the required transformation cannot be identified, the system of Guck allows multiple converters to be chained together to produce the result as party of a multi-stage process.

Bickmore

Bickmore discusses a re-authoring system to change a document originally designed for display on a desktop computer screen so that it can be displayed on a smaller display screen. Document and re-authoring parameters are manually entered into the re-authoring system as part of a configuration process. The system then converts a document into a number of pages, each page being fully displayable with minimal scrolling of the display screen.

Argument

Claim 1 as amended recites:

1. A computer-implemented method of delivering customized content over a network to mobile devices, the method comprising:
 - providing content in a generic markup language, the content in a generic markup language susceptible to being converted to a plurality of markup languages capable of being displayed on a mobile device interfaced with the network;
 - providing at least one registry containing device information for multiple types of mobile devices, the information including device attributes for each type of mobile device;
 - receiving a request for the content from a mobile device interfaced with the network;
 - identifying automatically without user input, based on the request, a type of device for the mobile device;**
 - retrieving device information for the identified type of device from the at least one registry;**
 - generating content for the mobile device by:**
 - converting the content in the generic markup language into a form of content displayable on the mobile device; and
 - customizing the converted content based upon at least one device attribute in the device information retrieved from the at least one registry, the customizing occurring programmatically without input from a user; and**
 - transmitting the generated content over the network to the mobile device.

Applicant respectfully submits that Guck in view of Bickmore fail to disclose, teach or suggest “identifying automatically, based on the request, a type of device for the mobile device;” “retrieving device information for the identified type of device from the at least one registry;” or “generating content for the mobile device by...customizing the converted content based upon at least one device attribute in the device information retrieved from the at least one registry, the customizing occurring programmatically without input from a user.”

With regard to the newly added claim element of “identifying automatically, based on the request, a type of device for the mobile device,” and “retrieving device information for the identified type of device from the at least one registry;” Guck is silent to these claim elements while Bickmore affirmatively teaches away from any sort of automatic device identification mechanism.

Bickmore requires a user to configure the document re-authoring system prior to use by manually providing information for any device upon which the re-authored document is to be displayed (see e.g.: Bickmore Figures 4 and 11a, and col. 13, lines 7-18 which discuss the user requesting and filling out a separate form to configure the re-authoring system prior to use). While the Examiner has previously suggested that Guck inherently discloses a registry of device attributes because it discusses the conversion of content to different formats (see page 6 of current Office Action for example citing col. 4, lines 33-39), a close reading of that passage of Guck and the remainder of Guck indicates that at most the Guck system discusses the conversion of content to fit a requested application format or communication protocol rather than the additional step of customizing or optimizing of that converted content based on a device attribute as claimed by Applicant. Col. 4, lines 33-39 states:

“When a user connects to a server using a particular protocol and seeks a document via a “get” request, the server finds the corresponding resource object and, if necessary, **can dynamically modify its characteristics to accommodate formatting requirements requested by the User and/or formatting requirements required by the protocol.**”[emphasis added]

The cited section thus discusses formatting requirements requested by the user or requirements required by a protocol. Neither of these scenarios is discussing customizing

content based on a **device** attribute and thus this passage can't be relied on as disclosing, teaching or suggesting a registry of device information containing device attributes. Similarly, the Examiner has also cited col. 4, lines 63-65 as showing the conversion of content. However, that section states "The dynamic conversion technique works equally well for conversion from one resource type to another and/or from one content format to another" and does not discuss converting information based on device type. The passage continues on to list examples such as converting email messages into text files and text files into HTML files(see col. 4, lines 65-67). This passage thus also fails to provide any sort of support for a finding of a registry of device information since the type of device is irrelevant to the format conversion being discussed. Similarly, the Examiner has cited Figure 7 in Guck and its discussion as showing a format conversion (see page 6 OA) but again a close examination of the passage reveals the passage does not provide any support for finding a registry of device information. Figure 7 and its discussion show and discuss three types of conversions. A file to file conversion based upon a request from an application (web browser). A file to message conversion based upon a request from an application (mail user). A file to file conversion used to supply an IVR audio playback stream to a user of a telephone IVR application(which has nothing to do with generation of content displayable on a mobile device as claimed by Applicant). None of these conversions discuss the conversion of displayable content based upon a device attribute but rather discuss application-specific conversions to satisfy a requesting application format and therefore can't be used as the basis for a finding of an inherently disclosed registry of device information. There is simply no basis for finding an inherently disclosed registry of device information in Guck as the type of device making the request is irrelevant to the Guck conversion process. Applicant agrees with the Examiner's previously expressed sentiment that Guck should be read as delivering content to a requesting device that may be utilized by the requesting device. However, it is quite possible to deliver compatible content based on requirements of a requesting application without optimizing/customizing the compatible content based on attributes of the device supporting the requesting application. While Guck may discuss the former, it is silent with regard to, and does not suggest, the latter. Therefore, since neither Guck nor Bickmore disclose, teach or suggest either device type identification or content conversion based on a device attribute, the cited combination of Guck in view of

Bickmore fails to satisfy Applicant's claim elements of "identifying automatically, based on the request, a type of device for the mobile device," and "retrieving device information for the identified type of device from the at least one registry" as recited in claim 1.

Additionally, in an effort to further clarify the distinctions between the claimed invention and the cited references, Applicant has further amended claim 1 to recite:

generating content for the mobile device by:

converting the content in the generic markup language into a form of content displayable on the mobile device; and

customizing the converted content based upon at least one device attribute in the device information retrieved from the at least one registry, the customizing occurring programmatically without input from a user;

Applicant's claimed method generates content for a mobile device in a two stage process by converting the content into a form displayable on the mobile device and further customizing the converted content based upon at least one device attribute in the device information retrieved from the registry holding device information. At most, the combination of Guck and Bickmore discuss the conversion of content for display on a mobile device. They do not however, for the reasons set forth above, disclose, teach or suggest the customizing of that converted content based upon a device attribute.

Accordingly, for at least these reasons, the combination of Guck and Bickmore fail to disclose all of the elements of Applicant's claim 1. Applicant therefore requests the reconsideration and allowance of claim 1.

Claims 2-15, 19-20

Claims 2-15 and 19-20 depend upon claim 1 and Applicant submits they are allowable for at least the same reasons. Applicant therefore requests the reconsideration and allowance of claims 2-15 and 19-20.

Claims 23 and 24

Claims 23 and 24 both recite “wherein the at least one device attribute for the mobile device includes at least one attribute from the group of a memory attribute, storage capacity attribute and operating system attribute for the mobile device.” In addition to the reasons set forth above during the discussion of claim 1, Guck in view of Bickmore fail to disclose, teach or suggest the customizing of converted content based on a memory attribute, storage capacity attribute or operating system attribute for the mobile device. Applicant therefore requests the reconsideration and allowance of claims 23 and 24.

Claims 21-23

Independent claim 21 is a medium claim corresponding to claim 1 and Applicant respectfully suggests that claim 21 is allowable for the same reasons set forth above for claim 1. Accordingly, Applicant requests the reconsideration and allowance of claim 21 (and claims 22-23 which depend thereon).

Claims 25-26

Newly added independent claim 25 is a system claim and Applicant respectfully submits that the reasoning set forth above for claim 1 is also applicable to claim 25. Allowance of claims 25 and 26 is requested.

CONCLUSION

In view of the above amendment, Applicant believes the pending application is in condition for allowance. Should the Examiner feel that a teleconference would expedite the prosecution of this Application, the Examiner is urged to contact the Applicant's attorney at (617) 227-7400.

Please charge any shortage or credit any overpayment of fees to our Deposit Account No. 12-0080, under Order No. AVE-003RCE3. In the event that a petition for an extension of time is required to be submitted herewith, and the requisite petition does not accompany this response, the undersigned hereby petitions under 37 C.F.R. §1.136(a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized to be charged to the aforementioned Deposit Account.

Dated: November 6, 2008

Respectfully submitted,

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